NOVELTY

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The question of novelty of inventions arises whenever a person seeks to enjoy the exclusive right to an invention, under the protection of a patent, as against the interests of the public.

This subject involves two inquiries; first, an inquiry into the law, rules and tests applied in determining the identity or diversity of inventions; and second, an inquiry into those statutory provisions in view of which novelty may be affirmed or denied of any one of identical inventions. This paper will be confined, in the main, to a discussion of questions arising under the second of these inquiries, those arising under the first belonging more properly to the domain of "invention."

A comprehensive understanding of the law of novelty requires that we keep in mind the fundamental principles which underlie our patent system. Robinson, in his law of Patents, states five principles, which he conceived to be fundamental, two of which are peculiarly applicable to the subject under discussion. They are:

> 1. "That under our existing civilization public policy requires the State to encourage the exercise of inventive skill by conferring upon inventors a temporary monopoly in their inventions, and by securing to them its enjoyment.
>
> 2. That the grant and acceptance of this monopoly creates a contract between the inventor and the State, obliging the former to an immediate and complete disclosure of his invention to the public, and the latter to the legal protection and vindication of the monopoly in the invention thus disclosed."

We should also keep in mind the important bearing that the leading English cases have in the interpretation of our laws. The patent acts of the United States are, in a great degree, founded on the principles and usages which have grown out of the English Statute; and "where English Statutes . . . have been adopted into our legislation, the known and settled construction of those statutes by the courts of law has been considered as silently incorporated into the acts, or have been received with all the weight of authority." (Pennock *vs.* Dialogue, 2 Peters, 1.)

To promote the progress of the useful arts is the policy of all enlightened governments; and experience has taught that this can be best accomplished by securing to inventors for limited times the exclusive right to their inventions. To grant to an inventor the exclusive right to his invention tends to awaken the inventive faculties and to encourage inventors in disclosing their secrets to the public.

The fact that the inventor confers a benefit upon the public, constitutes the essential principle upon which all patent systems are founded, and without which they would not be permitted to exist. This is the broad principle that distinguished the lawful from the unlawful monopolies that flourished in England prior to the enactment by Parliament of the Statute of Monopolies (21 Jac. ch., 3), and which influenced the British Parliament when they introduced into the Statute of Monopolies the proviso, that any language declaring void "all monopolies, and all commissions, grants, licenses, charters, and letters patent, heretofore made or granted, or hereafter to be made or granted, to any person or persons, bodies politic or corporate whatsoever, of or for the sole buying, selling, making, working, or using of anything, within this realm, etc.," should not extend to "any letters patent and grants of privilege for the term of fourteen years or under, hereafter to be made, of the sole working or making of any manner of new manufactures, within this realm, to the true and first inventor and inventors of such manufactures which others, at the time of making such letters patent and grant, shall not use, so as also they be not contrary to the law, nor

mischievous to the State, etc." And the framers of our Constitution were no doubt guided by the same principle when they empowered Congress to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. (U. S. Constitution, Article 1, Sec. 8.)

This principle has been recognized generally by our courts as the vital characteristic of our patent system. Thus, in Blanchard *vs.* Sprague, 3 Sumner, 535, Judge Story said:

> "Patents for inventions are now treated as a just reward to ingenious men and as highly beneficial to the public, not only by holding out suitable encouragements to genius and talents and enterprise, but as ultimately securing to the whole community great advantages from the free communication of secrets and processes and machinery which may be most important to all the great interests of society, to agriculture, to commerce, and to manufactures, as well as to the cause of science and art."

From the above it is evident that the primary object of our patent system, is not, as popularly supposed, to reward meritorious inventors, but to "promote the progress of science and useful arts." The interests of the public are of primary consideration while those of the inventor are but secondary and subordinate. A patent granting to an inventor, for a limited time, the exclusive right to his invention is but a means to the desired end; and it is only when an inventor has promoted the progress of science and useful arts by creating and disclosing to the public a new and useful invention that he is entitled to the protection of a patent.

The theory that a patent is a contract was suggested first by Lord Elden (Cartwright *vs.* Arnott, Easter Term 1800, cited in Harmer *vs.* Playne, 11 E., 101), and has been re-stated many times by the courts both in England and in the United States. In Whitney *vs.* Emmett (Baldwin, 303), Mr. Justice Baldwin said:

> "A patent is a bargain with the public in which the same rules of good faith prevail as in other contracts. . . ."

In Century Electric Co. *vs.* Westinghouse Electric Mfg. Co. (207 O. G., 1249) the court said:

> "A patent is a contract made by the acceptance by the Government of the offer which the patentee by his application makes to disclose his invention, in consideration that the United States will secure to him the exclusive use and sale of it for seventeen years." See also Grant *vs.* Raymond (6 Peters, 218).

The terms and conditions of the contract between the inventor and the Government are those prescribed by the acts of Congress relating to patents. Section 4886 of the Revised Statutes provides, subject to certain other conditions and limitations therein specified, that:

> "Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvements thereof, not known or used by others in this country before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, . . . may . . . obtain a patent therefor."

Section 4892 of the Revised Statutes provides that:

> "The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used. . . ."

And section 4920 of the Revised Statutes provides, that in an action for infringement the defendant may plead the general issue and prove on trial any one or more of the following special matters:

> "Second. That he (the plaintiff) had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was

> using reasonable diligence in adapting and perfecting the same; or—
>
> Third. That it has been patented or described in some printed publication prior to his supposed invention or discovery thereof, . . . or,
>
> Fourth. That he was not the original or first inventor or discoverer of any material and substantial part of the thing patented; . . ."

The law, therefore, requires as one of the conditions precedent to the grant of a patent, that the invention shall be "new." In fact, this is a vital element of the contract, for if the invention be not new, then the inventor is in no position to give to the public the required consideration for the grant. The element of novelty of an invention has always been regarded, both in England and in the United States, as essential to the validity of the patent. Lord Coke, in his commentary upon that clause of the Staute of Monopolies which excepts letters patent from the general prohibition of monopolies, says that the letters patent thus referred to "must be of such manufactures which any other at the time of making letters patent did not use; for albeit it were newly invented, yet if any other did use it at the making of the letters patent or grant of the privilege, it is declared and enacted to be void by this act (3 Inst., 184).

In Evans *vs.* Eaton (3 Wheaton, 454) the Supreme Court held:

> "Under the patent law if a thing secured by patent had been in use or had been described in a public work anterior to the supposed discovery, the patent is void whether the patentee had knowledge of this previous use or not."

By the act of 1790, Congress prescribed as an essential condition to the grant, that the invention be new to all the world, the language of the act being, "not before known or used;" by the act of 1793, the right to a patent was limited to those inventions "not known or used before the application;" by the act of 1800, to those inventions "never before known or used in this or any foreign country;" whereas the law as it now stands is far more

liberal to the inventor as will hereinafter more fully appear.

While the law requires that an invention, in order to be patentable, shall be new, yet this condition is not absolute either as to time or place. In the eye of the law an invention is new when it is:

> (1) "not known or used by others in this country before his (the inventor's) invention or discovery thereof, and—
>
> (2) not patented in this or any foreign country before his invention or discovery thereof, and—
>
> (3) not described in any printed publication in this or any foreign country before his invention or discovery thereof."

These statutory requirements of novelty will be considered in the above order.

PRIOR KNOWLEDGE OR USE.

The words of the Statute, "not known or used by others," mean "not known or used by the public." (Pennock *vs.* Dialogue, 2 Peters, 1.)

Prior knowledge of an invention such as will negative its novelty must, as a rule, include its practical use. (Searles *vs.* Bouton, 21 O. G., 1784; Judson *vs.* Bradford, 16 O. G., 171.) Such use of the invention is usually necessary to demonstrate its operativeness and practicability and to communicate knowledge thereof to the public. In Sayles *vs.* Railway Co. (4 Fisher, 584) it was held that where the identity between the two cases can be ascertained only by actual use, such use is necessary to negative novelty. But where an invention is complete and capable of being employed practically and this is evident from the mere inspection thereof, it will negative the novelty of a subsequent invention, where the two are identical, although not actually used before the date of the subsequent invention (Coffin *vs.* Ogden, 18 Wall., 120; Reed *vs.* Cutter, 1 Story, 590; Bedford *vs.* Hunt, 1 Mason, 302; Whitely *vs.* Swayne, 7 Wall., 685).

A prior invention, in order to anticipate a subsequent

invention, need not necessarily be used by the public but only in a manner accessible to the public. (Gayler *vs.* Wilder, 10 Howard, 477.) In Carpenter *vs.* Smith (1 Web., 530) on motion for a new trial, Ebinger, C. B., said:

> "Public use means a use in the public so as to come to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in his chamber. . . . The public use and exercise of an invention means a use and exercise in public not by the public."

To constitute prior knowledge and use of an invention, the extent of the use and the number of persons to whom the knowledge has been communicated is immaterial. The prior knowledge and use by a single person is sufficient. (Stead *vs.* Williams, 2 Web., 126; Coffin *vs.* Ogden, 18 Wall., 120; Bedford *vs.* Hunt, 1 Mason, 302; Bannerman *vs.* Sanford, 99 F. R., 294). Novelty may be negatived by evidence that only one specimen of the thing patented was made in this country prior to the invention to the patentee, even though it were not used until that time. (**Corn Planter Patent**, 23 Wall., 181; Parker *vs.* Ferguson, 1 Blatch., 407; Pitts *vs.* Wemple, 2 Fish., 10.)

A secret use of an invention by its author or by others, under injunction of secrecy, can never bar the right of a subsequent inventor to a patent. (Carpenter *vs.* Smith, 1 Web., 530; Kendall *vs.* Windsor, 21 Howard, 322; Mason *vs.* Hepburn, C. D., 1898, 510; Thomson *vs.* Weston, C. D., 1902, 521; Matthes *vs.* Burt, C. D., 1905, 574; Acme Co. *vs.* Cary Mfg. Co., 96 F. R., 344.) But where an invention is used by others than the inventor, in their trade, even though in concealment, but without any injunction as to secrecy, the use is a use in public. (Heath *vs.* Smith, 3 Ell. & B., 255; Reed *vs.* Cutter, 1 Story, 590; Dalby *vs.* Lynes, C. D., 1895, 381.)

To negative novelty, the prior knowledge or use must have been of the invention itself and not of mere representations thereof. Written descriptions or drawings do not constitute prior knowledge or use of an invention. (Detroit Lubricator Mfg. Co. *vs.* Renchard, 9

F. R., 293; Lyman Ventilating & Refrigerator Co. *vs.* Laylor, 6 O. G., 642; Northwestern Fire Extinguisher Co. *vs.* Philadelphia Fire Extinguisher Co., 6 O. G., 34.) Nor is novelty negatived by the prior construction of a model. (Union Paper Bag Machine Co. *vs.* Pultz & Walkley Co., 16 Blatch., 76; Kelleher *vs.* Darling, 14 O. G., 673; Gamewell *vs.* Municipal Signal Co., 61 F. R., 948.) With reference to prior drawings and prior models, Walker, in his Patent Laws (Sec. 61) states:

> "Novelty is not negatived by any prior unpublished drawings, no matter now completely they may exhibit the patented invention; nor by any prior model, no matter how fully it may coincide with the thing covered by the patent. . . . The reason of this rule is not stated with fullness in either of the cases which support it, but that reason is deducible from the statute, and from the nature of drawings and of models. The statute provides, relevant to the newness of patentable machines and manufactures and improvements thereof, that they shall not have been previously known or used by others in this country. Now, it is clear that to use a model or a drawing, is not to use the machine or manufacture which it represents, and it is equally obvious, that to know a drawing or a model, is not the same thing as knowing the article which that drawing or that model more or less imperfectly pictures to the eye. . . ."

In American *vs.* Wagner (151 F. R., 576) Judge Coxe (Lacombe & Townsend concurring) commented upon the above section and, after having reviewed the authorities cited by Mr. Walker, said:

> "The law, section 4886 of the Revised Statutes, provides that any person may obtain a patent, inter alia, for a machine invented by him, 'not known or used by others in this country before his invention or discovery thereof.' It is clear, as pointed out by Mr. Walker, that knowledge of a model of a machine is not knowledge of the

> machine itself any more than knowledge of a model of Brooklyn Bridge is knowledge of that structure. But we think the rule should be restricted to a model pure and simple as the word is understood in common parlance, viz., a pattern, a copy, a representation usually upon a reduced scale. The word "model" should not be construed to mean the identical device which is covered by the patent. . . ."

A device which is essentially a toy, without practical use, and not suggesting the subsequent invention, will not be held to anticipate. (Westinghouse *vs.* New England Granite Co., 110 F. R., 753.)

Nor is novelty negatived by prior forfeited or abandoned applications (Corn Planter Patent, 23 Wall., 181; Northwestern Fire Extinguisher Co. *vs.* Philadelphia Fire Extinguisher Co., supra, and rule 177); nor by applications for patents (Adams *vs.* Howard, 26 O. G., 825; Howes *vs.* McNeal, 15 O. G., 608; Barker *vs.* Stowe, 14 O. G., 559; Thomson-Houston Elec. Co. *vs.* Ohio Brass Co., 130 F. R., 542). These are not inventions, are not accessible to the public, hence confer no benefit on the public. (General Electric Co. *vs.* Allis-Chalmers Co., 190 F. R., 165; Vacuum Engineering Co. *vs.* Dumm, 209 F. R., 219.)

A mere prior application is not a bar to a subsequent application except as affecting priority. (Brown *vs.* Guild, 90 U. S., 181.)

To negative novelty the prior invention and the subsequent invention must be identical. (Judson *vs.* Bradford, 16 O. G., 171; Ellithorp *vs.* Robertson, 4 Blatch., 307; Livingstone *vs.* Jones, 1 Fish., 521.) And the prior invention to be effective as an anticipation must have been in its completed state. A leading case to this effect is Coffin *vs.* Ogden, supra, in which Judge Swayne said:

> "If a thing were embryotic or inchoate, if it rested in speculation or experiment, if the process pursued for its development had failed to reach the point of consummation, it can not avail to defeat a patent founded upon a discovery or inven-

> tion which was completed, while in the other case there was only progress, however near that progress may have approximated to the end in view. The law requires not conjecture, but certainty. If the question relates to a machine, the conception must have been clothed in substantial forms, which demonstrate at once its practical efficacy and utility." (See also Washburn *vs.* Beat Em All, 143 U. S., 275; Gottfried *vs.* The Phillip Best Brewing Co., 5 Bann & A., 4; Wayne *vs.* Holmes, 2 Fish., 20; Howe *vs.* Underwood, 1 Fish., 160; Galloway *vs.* Bleaden, 1 Web., 521; Drawbaugh *vs.* Seymour, C. D., 1896, 527.)

An alleged anticipation must disclose a practically operative device (Simonds *vs.* Hathorn, 93 F. R., 958); and should show the invention subsequently patented in such manner as to enable one skilled in the art or science to which it relates, to make or construct and practically use the invention for the purposes contemplated by the subsequent patent. (McNeely *vs.* Williams, 96 F. R., 978.)

And to be effective as an anticipation, it is not only necessary that the prior device shall have been complete and operative but it must have been used publicly. In Lincoln *vs.* McWhirter (142 F. R., 967) the court said:

> "It is not enough to defeat the patent that some one other than Gilmour had conceived the invention before he did, or had even perfected it, so long as it had not been in public use or described in some patent or publication. If Gilmour was an original inventor, though a subsequent one, it was his right to obtain a patent. . . ." (See also American Caramel Co. *vs.* Thomas Mills & Bro., 149, F. R., 743.)

Unsuccessful and abandoned experiments are not inventions, hence, do not negative the novelty of the subsequent inventions (Deering *vs.* Winona, 155 U. S., 286; American Bell Telephone Co. *vs.* Molecular Telephone Co., 32 F. R., 214; Brown *vs.* Guild, 90 U. S., 181; Coffin *vs.* Ogden, 85 U. S., 120); nor is novelty negatived by

prior abandoned inventions, when complete and operative, where knowledge thereof had not been communicated to the public. But where the prior abandoned inventions had been used in public, and the use was not for experimental purposes, the right to a patent therefor is forever lost. As was said in Pennock *vs.* Dialogue (2 Peters, 1):

> "It has not been, and indeed can not be, denied that an inventor may abandon his invention and surrender and dedicate it to the public. This inchoate right, thus once gone, can not afterward be resumed at his pleasure; for where gifts are once made to the public in this way, they become absolute."

Where it was shown that six pairs of cuff-button links were made and although they never went into general use, yet they were used for a short time by two or three of the witnesses, held to be a prior use and not an abandoned experiment, and to invalidate a patent for a later invention (Flomerfelt *vs.* Newwitter, C. D., 1898, 562). See also Clisby *vs.* Reese (88 F. R., 645); United Shoe Machinery Co. *vs.* Greenman (153 F. R., 283); Sayles *vs.* Railway Co. (4 Fisher, 584); Waterman *vs.* Thomson (2 Fish., 461).

An inventor may abandon his invention to the public by a disclosure but without claiming it in his patent and when he does so no one else acquires the right to obtain a patent therefor. See Ex parte Grosselin (C. D., 1901, 248), and the decisions therein quoted.

Where the question at issue is one of priority between rival inventors the later inventor who has received a patent, or who has completed his invention and given it to the public in commercial form, will prevail over an earlier inventor who had deliberately concealed his invention, suppressed its use and withheld it from the public. In such case the earlier inventor abandons his right to his rival. (Mason *vs.* Hepburn, C. D., 1898, 510; Marconi *vs.* Shoemaker, C. D., 1907, 392; Whitney *vs.* Brewer, C. D., 1912, 127; Quenzer *vs.* Collis, C. D., 1912, 172; Henderson *vs.* Gilpin, C. D., 1913, 310.) And in Barber

vs. Wood (207 O. G., 299) the Examiners-in-Chief ruled as follows:

> "We are satisfied that the testimony in this case shows that Wood with knowledge that Barber was in the field, deliberately withheld his invention from the market and neglected to renew his forfeited application or to reassert his claims for a patent until practically the end of the period allowed by the statute, and that such conduct on the part of Wood amounts to an abandonment of the invention within the meaning of that term as used in section 4897, R. S."

But it is well settled that this doctrine will not be extended to cases not falling clearly within it. Concealment or suppression by the first inventor, or some other of the elements essential to the doctrine of estoppel, must be clearly established by competent evidence. (Walker *vs.* Lederer, C. D., 1912, 177; Lederer *vs.* Walker, C. D., 1912, 560.)

Nor is novelty negatived by a prior accidental production of an invention unaccompanied by such knowledge as to enable the act to be repeated (Ransom *vs.* New York, 1 Fish., 252; Tilghman *vs.* Proctor, 102 U. S., 707; Wickelman *vs.* Dick, 88 F. R., 264); nor by anything that was neither designed, nor adapted nor actually used to perform the function of the thing patented (Clough *vs.* Manufacturing Co., 106 U. S., 178; National Brake-Beam Co. *vs.* Interchangeable Brake-Beam Co., 106 F. R., 693); nor by prior inventions in non-analogous arts. In Potts *vs.* Creager (97 F. R., 78) the Supreme Court held:

> "We do not think the disintegration of apples or of cocoanut kernels is so analogous to the disintegration of wet clay that the ingenuity shown in the adaptation of the device for disintegrating clay can be minimized by reference to these other arts."

And in Ansonia Brass and Copper Co. *vs.* Electric Supply Co., 144 U. S., 11, where an insulated cable or

wire was in question, the citation of a submarine cable coated somewhat similarly for the purpose of rendering it impervious, and not intended at all as a high insulator, was held not good as a citation.

If the prior devices are taken from analogous arts, they should furnish a clear suggestion of the subsequent invention. The rule was stated in Williams *vs.* American String-Wrapper Paper Co. (86 F. R., 641), as follows:

> "Anticipation ought not to be found in prior devices in the art to which a patent belongs unless they are of such a character as to furnish clear, if not unmistakable suggestion, of the improvement in question; and if the anticipatory suggestion comes from another art, it should, of course, have less significance, proportioned inversely to the distance from which it is brought."

Prior knowledge and use such as will negative the novelty of an invention, must have been in this country. Section 4886 R. S. so prescribes and section 4923 R. S. provides further:

> "Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication."

The reason for this provision of the law was stated in Gayler *vs.* Wilder (10 Howard, 477), as follows:

> "But if the foreign discovery is not patented, nor described in any printed publication, it might be known and used in remote places for ages, and the people of this country be unable to profit by it. The means of obtaining knowledge would not be within their reach, and so far as their interest is concerned, it may be the same thing as if the improvement had not been discovered. It is the in-

> ventor here that brings it to them and places it in their possession, and as he does this by the effort of his own genius, the law regards him as the first and original inventor, and protects his patent, although the improvement had in fact been invented before and used by others." (See also, De-Ferranti *vs.* Westinghouse, Jr. C. D., 1890, 114.)

Nor is novelty negatived by prior knowledge in this country of the use of an invention in a foreign country. In Westinghouse Machine Co. *vs.* General Electric Co. (C. D., 1913, 493) the court found that one DeKando had actually made his invention abroad and reduced it to practice; that one Waterman, an electrician, went abroad to inform himself as to the invention of DeKando; that the details of the invention were explained to him; that he saw the invention in actual use; that DeKando furnished him with an elaborate description of the invention; that he brought to the United States the information that he had gained in Europe, together with the description of the invention and notes that he made relating to the invention; that he made a written report of the invention to one Stillwell and described the same, in the United States, to a number of electrical engineers of standing, all capable of understanding the invention; and that he explained the invention to the American Institute of Electrical Engineers, in the United States, all prior to the legal date of the invention of the same thing by Armstrong, the patentee. Notwithstanding these facts the court sustained the validity of Armstrong's patent. (See also, Doyle *vs.* Spalding, C. D., 1884, 181; Gueniffet et al. *vs.* Wictorsohn, C. D., 1908, 367, and De Kando *vs.* Armstrong C. D., 1911, 413.)

The words of the statute, "before his invention or discovery," mean at the time of his invention or discovery. The state of public knowledge at the time an invention is made is the measure of an inventor's rights; and in an infringement suit, where anticipation is set up as a defense, it must be established as of a date anterior to the date of the patentee's discovery or invention; not merely

prior to the date of the application for or the date of his patent. (Von Schmidt *vs.* Bowers, 80 F. R., 121; Plough Works *vs.* Starling, 140 U. S., 184; Loom Co. *vs.* Higgins, 105 U. S., 580.)

And even though an invention may have been fully known to the public at a former period, yet if it has become lost and forgotten one who re-invents it confers a benefit upon the public and is entitled to the reward of a patent. This doctrine was announced in Gayler *vs.* Wilder, supra, in which Chief Justice Taney said:

> "It is well-known that centuries ago discoveries were made in certain arts the fruits of which have come down to us, but the means by which the work was accomplished are at this day unknown. The knowledge has been lost for ages. Yet it would hardly be doubted, if any one now discovered an art thus lost, and it was a useful improvement, that, upon a fair construction of the act of Congress, he would be entitled to a patent. Yet he would not literally be the first and original inventor. But he would be the first to confer on the public the benefit of the invention. He would discover what is unknown, and communicate knowledge which the public had not the means of obtaining without his invention. . . ." (See, also, Converse *vs.* Matthews, 58 F. R., 246, and Mason *vs.* Hepburn, C. D., 1898, 510.)

But in order to be able to determine the state of public knowledge at the time an invention is made, it is necessary first to fix the legal date of the inventive act.

This question was considered very exhaustively by Judge Colt in Automatic Weighing Machine Co. *vs.* Pneumatic Scale Corporation (166 F. R., 288) in which he reviewed all of the leading cases bearing on the question. The following excerpts from his opinion appear to sum up his conclusions:

> "From these established and seemingly contradictory principles of the patent law, first, that an invention in order to be patentable must be reduced to practice, and second, that, under the statutes, reduction to practice is not essential

either before or after the grant of a patent, it follows that there must be some stage of an invention when it must be presumed as a matter of law that the inventor has reduced his invention to practice; and that stage is presumed to have been reached when he has done all that he is required to do to obtain a valid patent, namely, when he has filed a complete and allowable application; and hence the Patent Office has adopted the rule that the filing of such an application is constructive reduction to practice, and the Federal Courts have adopted the rule that such an application is conclusive evidence that the patentee made his invention . . . that is, reduced his invention to practice . . . at least as early as that date.

"The law appears to be well established that a conception evidenced by disclosure, drawings, and even a model, confers no rights upon an inventor unless followed by some other act, such as actual reduction to practice, or filing an application for a patent. A conception of this character is not a complete invention under the patent laws. . . . An inventor must not stop with this stage of his invention, but he must proceed with reasonable diligence to perfect his invention, either by actual reduction to practice, or by filing his application for a patent.

"We understand the true rule to be that a patentee who undertakes to carry back the date of his invention to his drawings and disclosure must show reasonable diligence in adapting and perfecting his invention, either by actual reduction to practice or by filing his application. This rule is supported by the great weight of authority, and we have found no cases which directly hold that this is not the law. . . .

"No sound reason has been advanced why the doctrine of diligence should not apply to a patentee as well as to an inventor who has not secured a patent. On the other hand, any such distinction in favor of patentee is not in harmony with the patent laws. We have seen that an invention

in the sense of the patent law signifies a completed invention, and that the earliest date of an invention is the time of its completion. We have also seen that an invention may be completed either by actual reduction to practice or by filing a complete and allowable application in conformity with the statutes.

"This general principle, however, is subject to this qualification:

By section 15 of the act of July 4, 1836, c. 357 5 Stat., 123, it is provided that a defendant in an action upon a patent may set up in defense that the plaintiff had 'surreptitiously or unjustly obtained his patent for that which was in fact invented by another who was using reasonable diligence in adapting and perfecting the same.'

"Section 6 of the act of Feb. 21, 1793, c. 11, 1 Stat., 322, provided that the defendant in an action upon a patent may set up that the plaintiff 'had surreptitiously obtained a patent for the discovery of another person,' and section 15 of the act of 1836 amended by this section by adding the words 'or unjustly,' and the words 'for that which was in fact invented by another who was using reasonable diligence in adapting and perfecting the same.'

"This amendment introduced a new and just principle into the patent law, inasmuch as it protected the first conceiver of the invention by permitting him to carry back the date of his invention to the time of his drawings and disclosure, provided he was using reasonable diligence in adapting and perfecting his invention. . . ."

It sometimes occurs that the public come into possession of the full knowledge of an invention, from an independent source, after its conception by a later inventor but before he has reduced it to practice, or filed an application for a patent, the inventor, in such cases conferring no benefit on the public; and yet the later inventor under the law, as interpreted by the courts, is entitled

to a patent for his invention, provided he has exercised due diligence in reducing his invention to practice or in filing an application. The law, thus interpreted, is not entirely consistent with the principle that a patent is a contract, except upon the theory, that the inventive act is continuous and indivisible and is primarily an act of mind, the hand being the mere agent of the mind in embodying the inventive idea. The mental part of the inventive act in such cases, having been completed in advance of the public knowledge of the invention and nothing remaining to be done except what could be accomplished by the skilled mechanic, it seems reasonable and in harmony with the general policy of our patent system, to permit the later inventor to carry the date of his invention, and with it, the inchoate right to a patent, back to the date of its conception.

As to whether the doctrine of constructive reduction to practice is applicable to inventions disclosed but not claimed in applications for patents, the Court of Appeals, D. C., in Saunders *vs.* Miller (C. D., 1909, 461) said:

> "The filing of the process application can not be considered as constituting a constructive reduction to practice of the apparatus, for it was not the invention involved in the application."

With respect to the legal date of an invention made in a foreign country, in Welsbach Light Co. *vs.* American Incandescent Light Co. (C. D., 1900, 227) the court held, that the language of the statute refers to the actual and not the artificial date of an invention; and that the patentee, in a United States patent for an invention previously made by him and patented in a foreign country may, to avoid alleged use in this country by an infringer, before the date of the foreign patent, show the date of the application for the foreign patent, for the purpose of showing the actual date of his invention in a foreign country.

PRIOR PATENTS.

The second of the statutory requirements of novelty is, that the thing which an inventor seeks to protect by a patent, shall not have been patented in this or any foreign country before his invention or discovery thereof.

The term "patented" as employed in the statute means, "made known" (Rumpff et al. *vs.* Kohler *vs.* Krugener, C. D., 1883, 29; Howe *vs.* Morton, 1 Fisher, 586); and a patent is the medium through which a sovereign power makes known to the world an invention and the patentee's rights with respect thereto.

The public are presumed to take notice of a patent when published, whether issued by this or any foreign country; and to have full knowledge of the invention disclosed thereby. It is evident, therefore, that a later inventor of the same invention would be unable to confer any benefit on the public, hence, could not give the required consideration for a patent. As a matter of fact, the later inventor himself is presumed to have derived his knowledge of the invention from such prior patent, which presumption would negative his claim as an original and first inventor. It has been authoritatively stated that knowledge and the means of knowledge on the part of the public are the same. (1 Web., 718.)

In Cornish *vs.* Keene (1 Web., 501) Tindal, C. J., said:

> "Undoubtedly if you could show under the hand of the plaintiff, or anybody's hand, that the secret had been publicly communicated to the world, which was intended to be covered by the subsequent patent, there is an end to that patent; if the world at large had been informed by this specification of the color, fabric and manufacture which is intended to be effected by the subsequent patent, the subsequent patent must fall to the ground."

A patent has been defined as:

> "A grant of some privilege, property or authority made by the Government or sovereign of a country to one or more individuals." (Phillips Pat., 1.)

To answer the requirements of the law and to be effective as a bar to a grant for a subsequent invention, the prior patent must have been issued by the Government or sovereign of a country as a public document; it

must have been made accessible to the public by publication before the later invention or discovery; and it must have fully communicated the same invention to the public.

It is the prior patent itself and nothing less that is effective as an anticipation of a subsequent invention. It has been repeatedly held that prior descriptions in the specifications of applications for patents, where the patents have not issued, do not constitute anticipations. (Graham *vs.* McCormick, 21 O. G., 1533; Parker *vs.* Stowe, 14 O. G., 559.) Nor do prior patents, unless complete, negative the novelty of subsequent inventions. An English patent becomes complete only when the specifications have been filed in the office of the Great Seal (Lorillard *vs.* Dohan, 20 O. G., 1587; Smith *vs.* Goodyear Dental Vulcanite Co., 11 O. G., 246). See, also, Willimantic Linen Co. *vs.* Clark Thread Co., 4 Bann. and Ard., 134.

A prior patent, to anticipate, must have been accessible to the public. If kept in secret, it confers no benefit on the public and constitutes no bar to a subsequent grant. (Schoerken *vs.* Swift & Courtney & Beecher Mfg. Co., 19 O. G., 1493.) And the same is true of a private patent granted in a foreign country. (Brooks *vs.* Norcross, 2 Fisher, 661.)

The effective anticipating date of a patent is the date when it actually issued; and when a patent, alone, is set up as a defense, in an infringement suit, evidence will not be admitted to prove that the invention disclosed therein was made prior to said date. (Bates *vs.* Coe, 98 U. S., 31; General Electric Co. *vs.* Allis-Chalmers Co., 190 F. R., 165.)

In Johns-Pratt Co. *vs.* E. H. Freeman Elec. Co. (201 F. R., 356) the court held:

> "This patent notwithstanding it was cited by the Examiner as an anticipation of the invention of the patent in suit as a matter of fact is not found in the prior art. It was issued in January, 1900, which, although prior to the date of the issue of the patent in suit was subsequent to the filing of the application therefor, and consequently Downes can not properly be cited as an anticipation of it."

But when the question is that of priority between two parties holding patents for the same invention and not one of anticipation, and the defense is made under the fourth subdivision of section 4920 R. S.

> "That he (one of the patentees) was not the original and first inventor or discoverer of any material and substantial part of the thing patented."

it has been held that this fact may be established by any competent proof. (Sundh Electric Co. *vs.* Interborough Rapid Transit Co., 198 F. R., 94; Barnes Automatic Sprinkler Co. *vs.* Walworth Mfg. Co., 60 F. R., 605; Diamond Drill Machine Co. *vs.* Kelly Bros., 120 F. R., 282; Turner Brass Works *vs.* Appliance Mfg. Co., 203 F. R., 1001.)

There is, however, a well established practice of the Office making the effective anticipating date of a domestic patent, which shows or describes but does not claim the invention claimed by a later inventor, the date of the filing of the application on which the domestic patent issued; and to overcome such patent as a bar, the later inventor must make oath to facts showing the completion of his invention in this country before the filing of said application. (Rule 75; Ex parte McElroy, C. D., 1909, 52; Ex parte Gasser, C. D., 1880, 94; Ex parte Hunter, C. D., 1889, 218; Ex parte Saunders, C. D., 1883, 23; Ex parte Donovan, C. D., 1890, 109; Ex parte Eddleblute, C. D., 1890, 124; and Millett et al. *vs.* Duell, C. D., 1901, 410.)

In most cases an enforcement of the provisions of Rule 75 imposes no very great hardship upon applicants. There are cases, however, in which meritorious inventors who are able to meet all of the requirements of the law are barred by this rule from receiving patents for their inventions. For example, let it be assumed that the domestic patentee acquired his knowledge of the invention, disclosed but not claimed in his patent, in a foreign country; that the later inventor made his invention after the patentee filed his application but before the patent issued, and that the invention had not been known or

used in this country nor patented nor described in this or any foreign country before it was invented by the later inventor. In such a case the later inventor would be clearly entitled to a patent under the law and yet a patent would be denied him under this rule. In considering this phase of the question, we should of course keep in mind the fact that mere knowledge and use of an invention in a foreign country does not bar the right of an independent inventor to a patentee in this country (Sec. 4923, R. S.); and the further fact, that knowledge in this country of the use of an invention in a foreign country is not such knowledge or use of an invention in this country as is contemplated by the law. (Westinghouse Machine Co. *vs.* General Electric Co. supra.) This rule, therefore, appears to be inconsistent with the law.

"A foreign patent or other foreign printed publication describing an invention, is no defense to a suit upon a patent of the United States, unless published anterior to the making of the invention or discovery secured by the latter, provided that the American patentee, at the time of making application for his patent, believed himself to be the first inventor or discoverer of the thing patented. He is obliged to make oath to such belief when he applies for his patent; and it will be presumed that such was his belief until the contrary is proven." (Elizabeth *vs.* Pavement Co., 97 U. S., 126.) See, also, Columbus Chain Co. *vs.* Standard Chain Co., 148 F. R., 622.

In Canada an invention is patented so as to be available to the patentee when signed, sealed and registered. (Bate Refrigerating Co. *vs.* Gillett, C. D., 1882, 426.) An English patent is not issued until the great seal is attached, although it may be dated back to an earlier date. (Holmes Burglar Alarm Telegraph Co. et al. *vs.* Domestic Telegraph & Telephone Co. et al., C. D., 1890, 403.) In De Ferranti *vs.* Westinghouse Jr. (C. D., 1890, 114), Commissioner Mitchell held, that under the British laws (Act of Dec. 31, 1883) an invention can not be said to be "patented" within the meaning of sections 4886 and 4887 of the Revised Statutes, before the seal is finally

attached, the sealing of the patent being the last step preceding its publication as a patent; and that—

> "The fact that the specification (British) of the foreign applicant was made accessible to the public in an unpublished form prior to the filing date of an American application is immaterial, because it was not then a printed publication, nor was it a patent." (See, also, Bliss *vs.* Merrill, C. D., 1888, 182.)

The date of publication of a foreign patent is the constructive date of its publication in this country. (Rousseau *vs.* Brown, D. C., 1903, 101.)

Where a foreign patent on its face purports to have been published on a certain date, the burden of proving that it was not effective as a publication on that date is shifted to the party making the allegation. (Hummel *vs.* Tingley, C. D., 1900, 22.)

As to the sufficiency of disclosure of an invention in an alleged anticipating patent, it is a well settled rule, that an invention patented here is not to be defeated unless the description or drawings of the prior patent contain or exhibit a substantial representation of the patented invention, and are so full, clear and exact as to enable any person skilled in the art or science to which it appertains, without the necessity of making experiments, to practice the invention. Hanifen *vs.* Godshalk Co., C. D., 1898, 342; Kirchberger *vs.* American Acetylene Burner Co., 128 F. R., 599; Westinghouse Electric Co. *vs.* Great Northern Ry. Co., 88 F. R., 258; Gordon *vs.* Warder, 150 U. S., 47; Seymour *vs.* Osborne, 11 Wall., 516.

PRIOR PRINTED PUBLICATION.

The third of the statutory requirements of novelty is, that the invention shall not have been described in any printed publication in this or any foreign country before his (the inventor's) invention or discovery thereof.

The essentials of a publication, in order that it may be effective as an anticipation of a subsequent invention,

were stated by the court in Reeves *vs.* The Keystone Bridge Co. (5 Fisher, 456) as follows:

> "Section 15 of the Patent Act of 1836—and it has been incorporated in the act of 1870—provides that a patent may be successfully opposed by showing that the thing patented 'had been described in some public work anterior to the supposed discovery thereof by the patentee'. It is obvious that this provision requires, first, a description of the alleged invention; second, that it shall be contained in a work of public character and intended for the public; and, third, that this work was made accessible to the public by publication before the discovery of the invention by the patentee."

In Stead *vs.* Williams (2 Web., 137) Tindell, C. J., stated the underlying principle of the law, as follows:

> "If the invention has already been made public in England, by a description in a work —whether written or printed—which has been publicly circulated, in such case the patentee is not the first and true inventor within the meaning of the statute whether he has himself borrowed his invention from the public or not; because we think the public can not be precluded from the right of using such information as they were already possessed of at the time the patent was granted."

Works of a public character are those intended for the dissemination of the ideas of the author throughout the public generally, and not those addressed to particular individuals or to particular classes of individuals. Works of the latter character, even though printed, are not such publications as contemplated by law. It has been held, that business circulars which are sent only to persons engaged or supposed to be engaged in the trade, are not publications, in the sense in which the term is employed in the statute (Britton *vs.* White Mfg. Co., C. D., 1897, 508; New Process Fermentation Co. *vs.* Koch, C. D., 1884, 421; Seymour *vs.* Osborne, 11 Wall., 516);

and in Forschner *vs.* Baumgarten (35 O. G., 137) the court took the same view with respect to a catalogue. On the other hand, "Crookes' Hand Book of Dyeing and Calico Printing," was held to be a publication such as would defeat claims of a subsequent inventor for an invention therein disclosed. (*In re* Schaeffer, C. D., 1894, 134). In Ex parte Atterbury, C. D., 1876, 79, it was held that a "pattern book" was not a printed publication. Acting Commissioner Spear said:

> "It is fatal to it that it bears no date, to go no further. On inspection, it appears to be merely a collection of plates, without a word of description and no information is conveyed of any certain character whatever. It can only be the foundation of guesses more or less probable."

An undescribed figure of the drawing of a patent, however, which adequately discloses an applicant's invention, has been held a good and sufficient reference in and of itself alone. (Ex parte Borden, C. D., 1884, 9; Millett *vs.* Duell, C. D., 1901, 410.) There are many decisions to the effect that a description in an application for a patent, filed in the Patent Office, is not a publication. (Northwestern Fire Extinguisher Co. *vs.* Philadelphia Fire Extinguisher Co., 6 O. G., 34.)

In Cohn *vs.* U. S. Corset Co. (6 O. G., 259) it was held that an English provisional specification is a publication when once published; but not unless complete and specific, was, in effect, the ruling in Goff *vs.* Stafford (14 O. G., 748) and Coburn *vs.* Schroeder (22 O. G., 419).

The so-called publications made in the British Official Journal and the German Imperial Gazette concerning applications for patents in these countries and the laying open of such applications to public inspection do not constitute either publications of or patents for the inventions involved. (Parkin et al. *vs.* Jenness, C. D., 1893, 64.)

A prior publication, in order to be effective as an anticipation must not only be of a public character but must have been made accessible to the public. In Cottier *vs.* Stimson (20 F. R., 906) the court said:

> "But something besides printing is required. The statute goes upon the theory that the work

> has been made accessible to the public, and that the invention has been thereby given to the public and is no longer patentable to any one. Publication means put into general circulation or on sale where the work is accessible to the public."

A journal devoted to a special science, printed in German, and deposited in the library of the Patent Office and in the library of the Institute of Civil Engineers and accessible to them, although proved to have been read by but one person, was held to be a sufficient publication. (United Telephone Co. *vs.* Harrison, Cox-Walker & Co., L. R., 21 Ch., 720.)

And the publication must have been made accessible to the public prior to the date of the later invention. (Elizabeth *vs.* Paving Co., 97 U. S., 126; Bartholomew *vs.* Sawyer, 1 Fisher, 516.)

As to the sufficiency of disclosure in a prior publication of the invention sought to be anticipated, Mr. Justice Clifford said:

> "Patented inventions can not be superseded by the mere introduction of a foreign publication of the kind, though of prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement, in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, to make, construct, and practice the invention, to the same practical extent as they would be enabled to do if the information was derived from a prior patent. Mere vague and general representations will not support such a defense, as the knowledge supposed to be derived from the publication must be sufficient to enable those skilled in the art and science to understand the nature and operation of the invention and to carry it into practical use. Whatever may be the particular circumstances under which the publication takes place, the account published, to be of any effect, to support such a defense must be an account of a complete and

> operative invention capable of being put into practical operation." (Seymour *vs.* Osborne, 11 Wall., 516.) See also, Westinghouse Co. *vs.* Saranac, 108 F. R., 221; Downtown *vs.* Yaeger, 108 U. S., 466; Marconi *vs.* Shoemaker, C. D., 1907, 392.

The words, "skilled in the art" employed in the statute and in the decisions, include careful workmen who are skillful in the particular line of business in which they are engaged. The law does not warrant a construction of those words which includes only persons of high scientific attainments. (Pupin *vs.* Hutin *vs.* Stone, C. D., 1902 269.)

The description in a prior foreign publication must be such as to show that the article described in the patent in suit can be certainly arrived at by following the description, without the assistance of local prior knowledge or a local prior use in the foreign country where the description is published. (Badische *vs.* Kalle, 104 U. S., 802.)

A prior description in an encyclopedia of an improvement claimed unsupported by any proof that it was operative, held not sufficient to defeat a patent. (Seymour *vs.* McCormick, 60 U. S., 96.)

BURDEN OF PROOF.

The rule of evidence, in suits for infringement, was stated in Lalance & Grosjean Mfg. Co. *vs.* Habermann Mfg. Co. (C. D., 1893, 167) as follows:

> "He who alleges prior use must establish it by the same high class of testimony which a prosecuting attorney is required to produce in a criminal cause. He holds the affirmative of that issue and must prove it beyond a reasonable doubt. If the evidence is susceptible of two interpretations, the one sustaining the other destroying the patent, the court must accept the former."

But where the defense establishes a case of anticipation, the burden of proof is transferred to the com-

plainant, who must furnish the court with convincing proof that the anticipation was anticipated by him in making the invention. (New England Motor Co. *vs.* Sturtevant Co., 150 F. R., 131; Consolidated Ry. Electric Co. *vs.* Adams & Westlake Co., 161 F. R., 343.) Such proof must establish a well-defined perfection of the invention anterior to the date of the anticipation, keeping in view the rule, that "a conception of the mind is not an invention until represented in some physical form." "Expression of the means of an alleged invention, in a drawing or sketch, is frequently the best attainable evidence of the needful 'representation in physical form,' and may rightly be accepted as satisfactory proof of such fact, when fairly authenticated, definite, and reasonable under all the circumstances." (Consolidated Ry. Electric Co. *vs.* Adams & Westlake Co., supra.)

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